

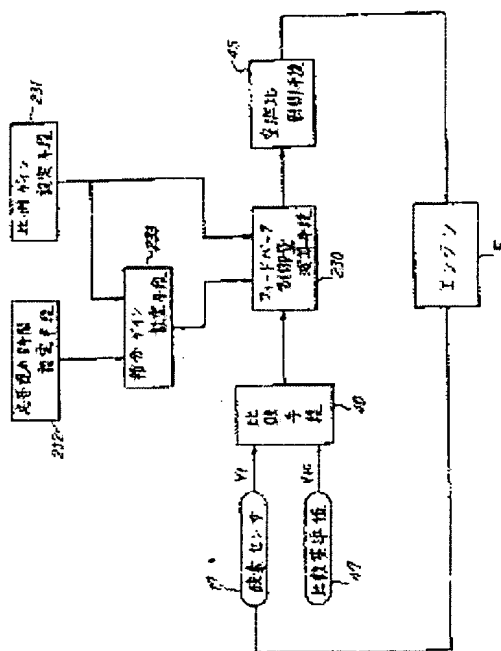


# AIR/FUEL RATIO CONTROL SYSTEM FOR INTERNAL COMBUSTION ENGINE

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## Abstract of JP1313641

**PURPOSE:** To maintain a high exhaust gas purifying efficiency by increasing and reducing the rich and lean integration gains in the PI conversion for the air-fuel ratio offset, depending onto the rich and lean response delay time information of an oxygen sensor.  
**CONSTITUTION:** The O<sub>2</sub> concentration in the exhaust gas in an internal combustion engine E which is detected by an oxygen sensor 17 and a standard value 47 are compared in a comparing means 48, and a calculation means 230 calculates the feedback quantity through the PI calculation on the basis of the offset of the O<sub>2</sub> concentration, and an air fuel ratio control means 45 is controlled. The rich and lean integrations gains in the PI calculation are set by an integration gain setting means 233, depending on the rich and lean delay time information of the oxygen sensor 17 which are set according to the engine load and the revolution speed in a setting means 232 and the rich and lean proportional gains which are set by a setting means 231. Thus, even if the response delay time of the oxygen sensor varies according to the engine operation state, the superior air/fuel ratio control can be carried out.



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